

IN THE CLAIMS:

Cancel claims 1-49.

Ex-nite Amend claims 50-62 as follows:

50. (Amended) A protein complex comprising five monomeric fusion proteins; where each fusion protein comprises a cholera toxin B subunit linked to a first immunogenic antigen from a causal factor of a first mammalian disease; and where the antigen elicits a protective response to the disease.
51. (Amended) The protein complex of claim 50, where the first immunogenic antigen is a rotavirus antigen.
52. (Amended) The protein complex of claim 50, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.
53. (Amended) The protein complex of claim 50, further comprising a second cholera toxin subunit.
54. (Amended) The protein complex of claim 53, where the second cholera toxin subunit is cholera toxin A2 subunit.
55. (Amended) The protein complex of claim 50, further comprising a second immunogenic antigen from a causal factor of a second mammalian disease.
56. (Amended) The protein complex of claim 55, where the second immunogenic antigen is a rotavirus antigen.
57. (Amended) The protein complex of claim 55, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.
58. (Amended) The protein complex of claim 50, where the first mammalian disease is an infectious enteric disease.
59. (Amended) The protein complex of claim 50, further comprising a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

60. (Amended) The protein complex of claim 59, where the first immunogenic antigen is a rotavirus antigen.

61. (Amended) The protein complex of claim 59, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

62. (Amended) The protein complex of claim 59, where the first mammalian disease or the second mammalian disease or both the first mammalian disease and the second mammalian disease is an infectious enteric disease.

63. (Amended) A protein complex encoded by a DNA construct that encodes, upon expression in a plant cell, a protein complex comprising five monomeric fusion proteins; where each fusion protein comprises a cholera toxin B subunit linked to a first immunogenic antigen from a causal factor of a first mammalian disease; and where the antigen elicits a protective response to the disease.

64. (Amended) A protein complex encoded by a DNA construct that encodes, upon expression in a plant cell, a protein complex comprising:

a) five monomeric fusion proteins, where each fusion protein comprises a cholera toxin B subunit linked to a first immunogenic antigen from a causal factor of a first mammalian disease, and where the antigen elicits a protective response to the disease; and
b) a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

65. A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 50.

66. A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 59.

67. A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 63.

68. A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 64.

Add new claims 69-86

69. The protein complex of claim 63, where the first immunogenic antigen is a rotavirus antigen.

70. The protein complex of claim 63, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.

71. The protein complex of claim 63, further comprises a second cholera toxin subunit.

72. The protein complex of claim 71, where the second cholera toxin subunit is cholera toxin A2 subunit.

Amended 73. The protein complex of claim 63, further comprises a second immunogenic antigen from a causal factor of a second mammalian disease.

74. The protein complex of claim 73, where the second immunogenic antigen is a rotavirus antigen.

75. The protein complex of claim 73, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

76. The protein complex of claim 63, where the first mammalian disease is an infectious enteric disease.

77. The protein complex of claim 63, further comprising a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

78. The protein complex of claim 77, where the first immunogenic antigen is a rotavirus antigen.

79. The protein complex of claim 77, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

80. The protein complex of claim 77, where the first mammalian disease or the second mammalian disease or both the first mammalian disease and the second mammalian disease is an infectious enteric disease.

81. The protein complex of claim 64, where the first immunogenic antigen is a rotavirus antigen.

82. The protein complex of claim 64, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Added 83. The protein complex of claim 64, where the second immunogenic antigen is a rotavirus antigen.

84. The protein complex of claim 64, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

85. The protein complex of claim 64, where the first mammalian disease is an infectious enteric disease.

86. The protein complex of claim 77, where the second mammalian disease is an infectious enteric disease.

REMARKS

Claims 1-68 are pending in the present application. All claims are subject to a Restriction Requirement. Claims 50-64 stand rejected for the reasons stated in the Office Action. In response, claims 1-49 have been canceled, claims 50-64 have been amended and new claims 69-86 have been added. Support for these amendments can be found at page 17, line 25 through page 18, line 8, and at page 21, lines 16-27, among other places. No new matter is added by these amendments. Entry of these amendments is requested.

With Respect to the Restriction Requirement:

In response to the Restriction Requirement, the Applicant elects the claims of Group III, namely, claims 50-64, and has canceled claims 1-49 by this amendment. As discussed